



Model Course Outline Requirements

Model course lead developers are required to provide the following components for each of their course(s), at a minimum:

1. Course description
2. Student Learning Outcomes (SLO)
3. Topical Unit Outline (organized into the ten component categories identified by industry as essential components of the occupation of Geospatial Technician):
 - a. Objectives
 - i. Lecture materials*
 - ii. Lab exercises*
 - iii. Data files*
 - b. Assessment metric
 - i. Sample exam(s)*
4. Textbook(s) recommendations
5. External reference(s)

*Specific material/exercises/data/exams are at the discretion of the developer and are offered as samples; not mandatory components in the course. Our objective is to provide as complete a model course outline as possible without being too prescriptive on the precise course content. It is expected faculty that adopt these outlines will modify the material to meet their own local industry needs.

The following documents are sample implementations of these guidelines that were taken from Internet search and used with author's permissions:



Course Title:			
Course Prefix & No.:	LEC:	LAB:	Credit Hours:

COURSE DESCRIPTION:

COURSE PREREQUISITE (S):

RATIONALE:



REQUIRED TEXTBOOK (S) and/or MATERIALS:

Title:

Edition:

Author:

Publisher:

Materials:

Attached course outline written by:

Date:

Reviewed/Revised by:

Date:

Effective quarter of course outline:

Date:

Academic Dean:

Date:

Course Objectives, Topical Unit Outlines, and Unit Objectives must be attached to this form.



TITLE: _____

PREFIX/NO: _____

COURSE OBJECTIVES:

TOPICAL UNIT OUTLINE/UNIT OBJECTIVES:





COURSE REQUIREMENTS/EVALUATION:

COURSE OBJECTIVES/ASSESSMENT MEASURES

COURSE OBJECTIVES	ASSESSMENT MEASURES
1.	1.
2.	2.
3.	3.



4.	4.



Evaluating the Quality of Assignments and Activities

How well does this activity engage students and promote learning?

	no	a little	somewhat	definitely
<p>Does this activity/assignment help students place new knowledge, tasks, and experiences into the context of what they already know?</p> <p>Suggestions for improvement:</p>	1	2	3	4
<p>Does this activity/assignment have an effective "hook" that engages students at the outset?</p> <p>Suggestions for improvement:</p>	1	2	3	4
<p>Does this activity/assignment provide students with the opportunity for independent thinking, analysis, and/or problem-solving, as opposed to just following cookbook steps (the "keystrokes vs. content" question)?</p> <p>Suggestions for improvement:</p>	1	2	3	4
<p>Does this activity/assignment require students to synthesize, discuss, extend, reflect on what they have learned, apply to other problems, prepare them for future activities?</p> <p>Suggestions for improvement:</p>	1	2	3	4
<p>Does this activity/assignment have an adequate mechanism for providing insights into what students have or have not</p>	1	2	3	4



learned?

Suggestions for improvement:

Is the activity/assignment scientifically accurate?

	major inaccuracies	minor inaccuracies	accurate
Is the activity/assignment accurate in terms of GIS/RS technique and topical content?	1	2	3
Suggestions for improvement:			

Does the assignment meet the goals outlined by the instructor?

	no	a little	somewhat	definitely
The cover sheet provided by the instructor outlines the goals for the activity/assignment. Is the activity/assignment well-aligned with the stated goals (i.e., does it accomplish what the instructor intended)?	1	2	3	4
Suggestions for improvement:				
If a student completes the assignment, can the instructor determine whether the student has met the stated goals?	1	2	3	4
Suggestions for improvement:				

How easily could this activity/assignment be used by others?

	requires major	requires minor	fine as
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	changes/additions	changes/additions	written
<p>Could this activity/assignment be easily used by someone else as it is currently written?</p> <p>Suggestions for improvement:</p>	1	2	3
<p>Does the material provided offer adequate teaching tips, explanations, and/or suggestions for instructional strategies for someone else to adapt or adopt the activity/assignment? What suggestions do you have for the activity web cover sheet?</p> <p>Suggestions for improvement:</p>	1	2	3

Used by permission from Barbara Barbara Tewksbury, Hamilton College, btewksbu@hamilton.edu

On the Cutting Edge (<http://serc.carleton.edu/NAGTWorkshops>)



SAMPLE COURSE OUTLINE – LEARNING OUTCOMES BASED COURSES

1. Course Name: Co-op Work Placement
- Course Number: COOP-0022
- Program to Which Course is Taught: GIS Environmental Technologies
- Total Course Credits: 15
- Text/Learning Resource Materials: www.coopworkplacement.ca

2. Rationale:

Co-op students gain an enriched understanding of their academic program through practical application. The co-op experience can motivate students to further education as well as lead to relevant employment after graduation. Studies show that co-op students gain employment sooner after graduation, have higher salaries, and are more likely to find employment related to their degree area than non-co-op graduates.

Through the competitive co-op placement process, students develop the ability to assess their skill level, to prepare a polished résumé, and to interview successfully. Through their work experiences, students develop and refine employability skills, gain an understanding of career opportunities in their field, and gain an understanding of the realities of the workplace. (Adapted from Canadian Association for Co-operative Education)

3. Prerequisites:

Completion of the first year of studies in the GIS Environmental Technologies program (Required successful completion of COMP-0230 GIS 2, AGRC-0131 Crop Science, AGRC-0088 Soils) with CWGPA of 2.0 or better.

4. Corequisites:

None

5. Learning Outcomes:

1. The learner will apply and reinforce year one classroom learning.
2. The learner will broaden their experience to relate to and build on in year two classroom learning.
3. The learner will enhance their employability skills and career readiness.



6. Elements of Performance:

1. The learner will apply and reinforce year one classroom learning.
 - 1.1. Apply agronomic, communications, GPS and GIS learning in a GIS/GPS context.
2. The learner will broaden their experience to relate to and build on in year two classroom learning.
 - 2.1. Perform GIS/GPS job responsibilities.
 - 2.2. Interact with employers, coworkers, and customers/clients.
 - 2.3. Observe and evaluate business operation, experiences, challenges, problem-solving strategies typical in a GIS/GPS context.
3. The learner will enhance their employability skills and career readiness.
 - 3.1. Prepare effective self-marketing materials.
 - 3.2. Develop and implement effective job search strategies.
 - 3.3. Receive and respond to evaluation by self, employer, and faculty advisor.
 - 3.4. Gain GIS/GPS experience, contacts, and professional referrals.

7. Delivery Method:

Students will be responsible to acquire employment in an GIS/GPS environment. Employment positions are subject to approval by faculty advisors, to ensure that they will contribute to desired learning outcomes.

8. Method of Evaluation:

The following requirements are compulsory for completion of the co-op work placement:

- Placement is representative of program of study
- Placement is a minimum of 600 hours in duration
- Co-op work placement meeting(s) with co-op work placement instructor
- Work placement meeting during summer term or equivalent
- Four email assignments that are submitted on time
- Positive final employer evaluation that is submitted on time
 - An overall average rating of 75% or greater

Supplemental Privileges:

None



Evaluation Scale:

P – pass

NP – no pass

9. Generic/Employability skills emphasized in this course:

X	communication - written	X	communication - oral	X	communication - visual
X	analytical	X	creative thinking	X	work safely
X	interpersonal	X	numeracy	X	organizational
X	problem solving	X	technological	X	Group/teamwork

Notes/other:

10.Details of Preparation:

James Ellis, September 2007

11. Approval:

Academic Dean

Date



ATTACHMENT

Course Name:	Co-op Work Placement
Course Number:	COOP-0022
Program in Which Course is Taught:	GIS Environmental Technologies
Total Course Credits:	15

Excused Absence:

In the case of a missed test or compulsory class activity, a grade of zero will be assigned unless the student has an excused absence. An excused absence is only approved under the following circumstances by the instructor and/or Dean/Chairperson:

1. Medical illness – doctor's certificate may be required by the college.
2. Snow or ice storm causing highway department to issue a travel advisory.
3. Family/personal crisis.
4. A specialist appointment that has been previously set and if missed would cause undue medical problems.
5. Jury duty.
6. Natural disaster, e.g. flood/hurricane.

A student who has an excused absence will be allowed to write a test or submit an assignment; date to be determined by the instructor in consultation with the student. Note that a fee of \$10 will be assessed before a student will be permitted to write a missed test.

Late assignments/projects:

- All requirements are compulsory for successful completion of the Co-op Work Placement.
- Late submissions will not be accepted unless one of the six reasons on the course outline is provided.
- It is your responsibility to ensure that email has been successfully sent by checking your sent folder and by keeping a record of your submissions.